

Amphibians and Climate Change

Science on a Sphere Workshop

April 25th, 2017

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Amphibians in Crisis

Amphibians in Decline

 7660 Species



6,760 Frogs and Toads



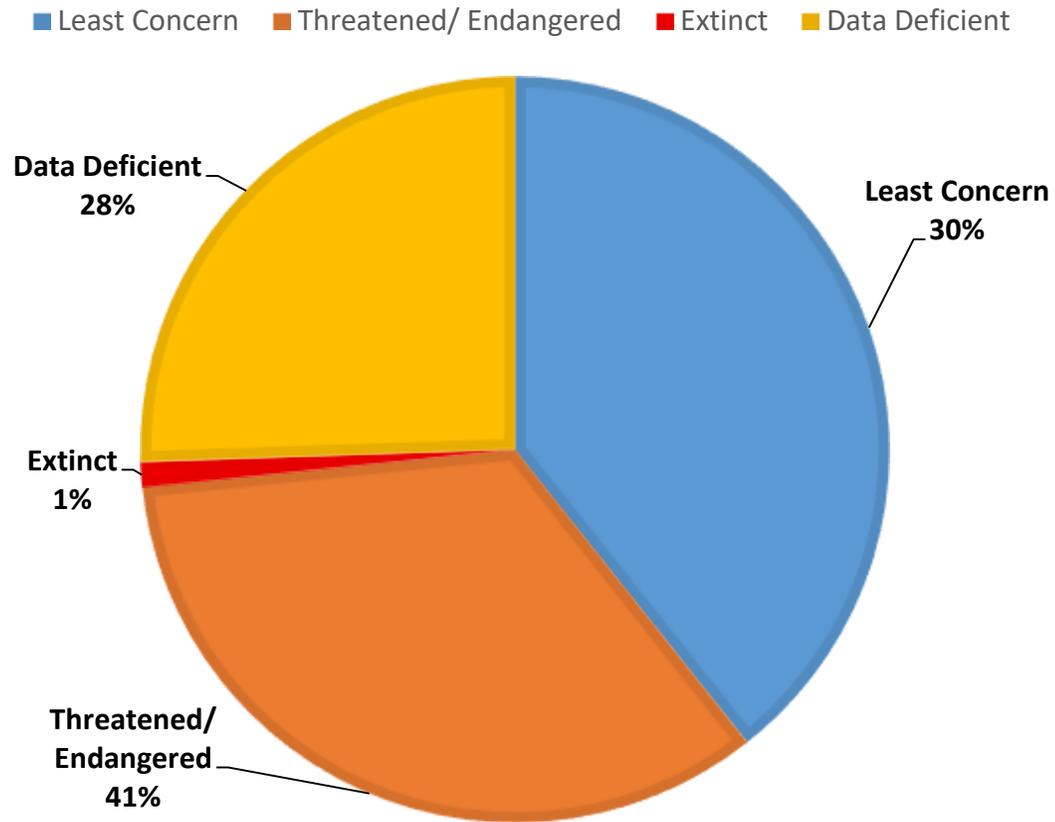
695 Salamanders and Newts



205 Caecilians

Amphibians in Decline

STATE OF AMPHIBIANS

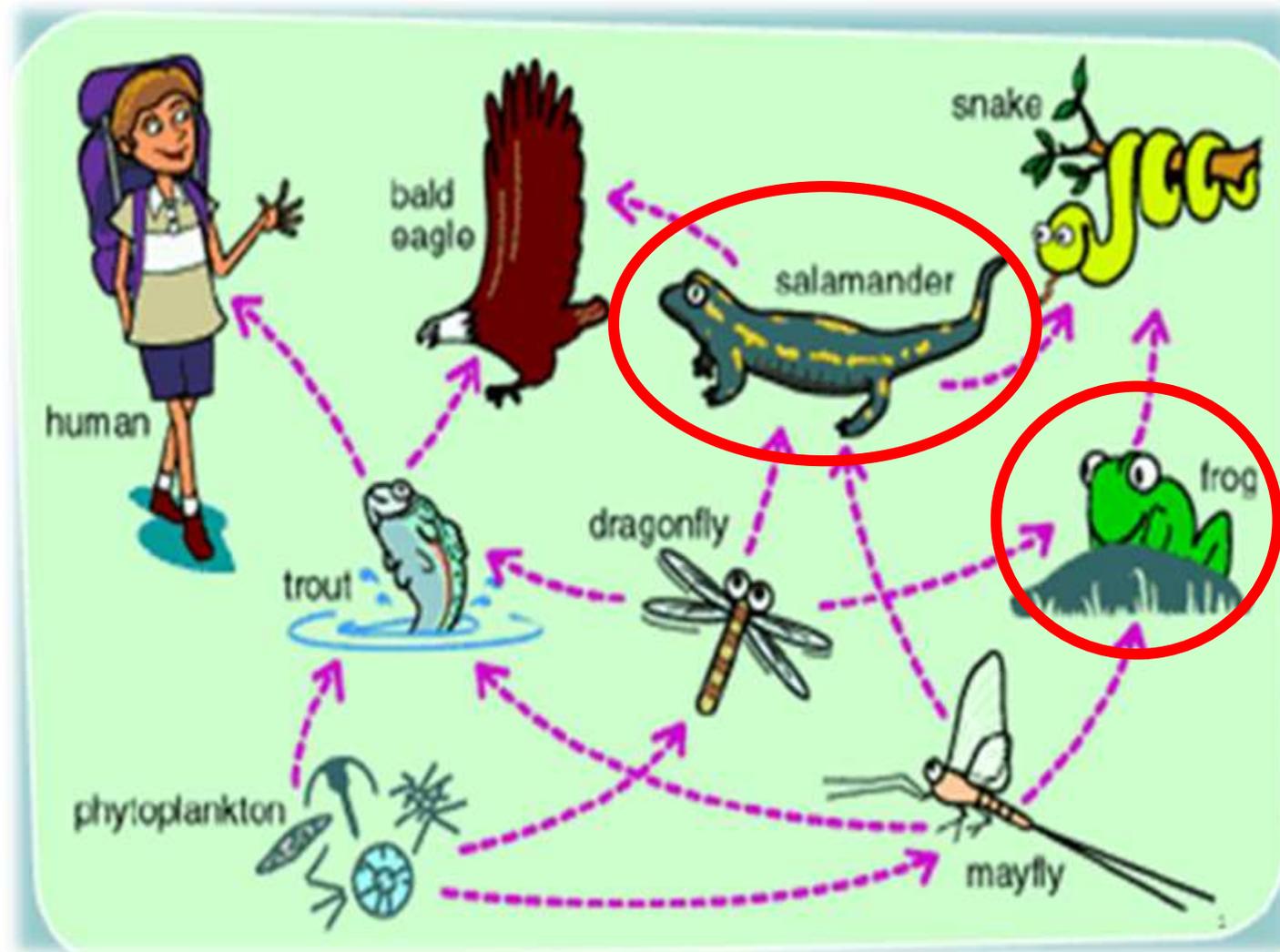


- 🦎 Declining: 42%
- 🦎 Increasing: <1%
- 🦎 Threatened by Order:
 - 🦎 Frogs/Toads: 32%
 - 🦎 Newts/Salamanders: 50%
 - 🦎 Caecilians: 6%
 - 🦎 65% Data Deficient



IUCN estimates as of 2016

Amphibians in Decline: Why do we care?



Amphibians in Decline: Why do we care?



Amphibians in Decline: Why do we care?



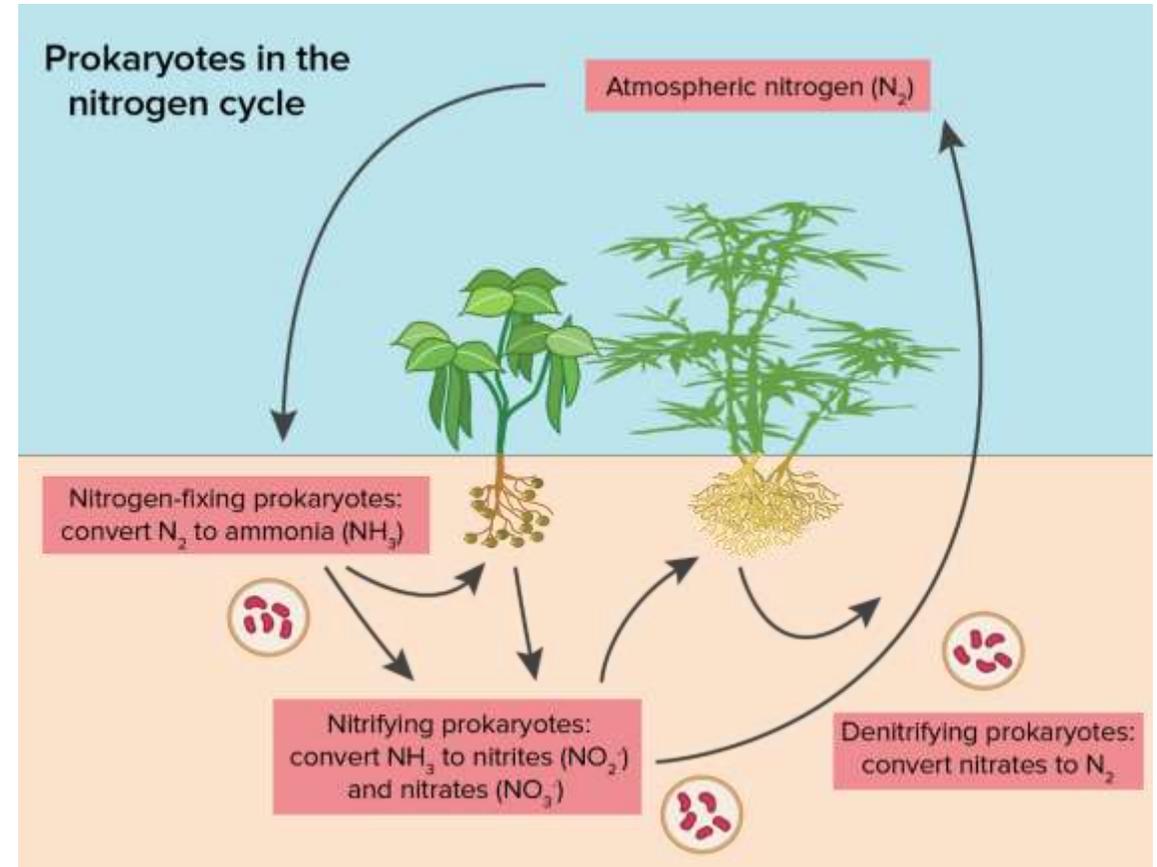
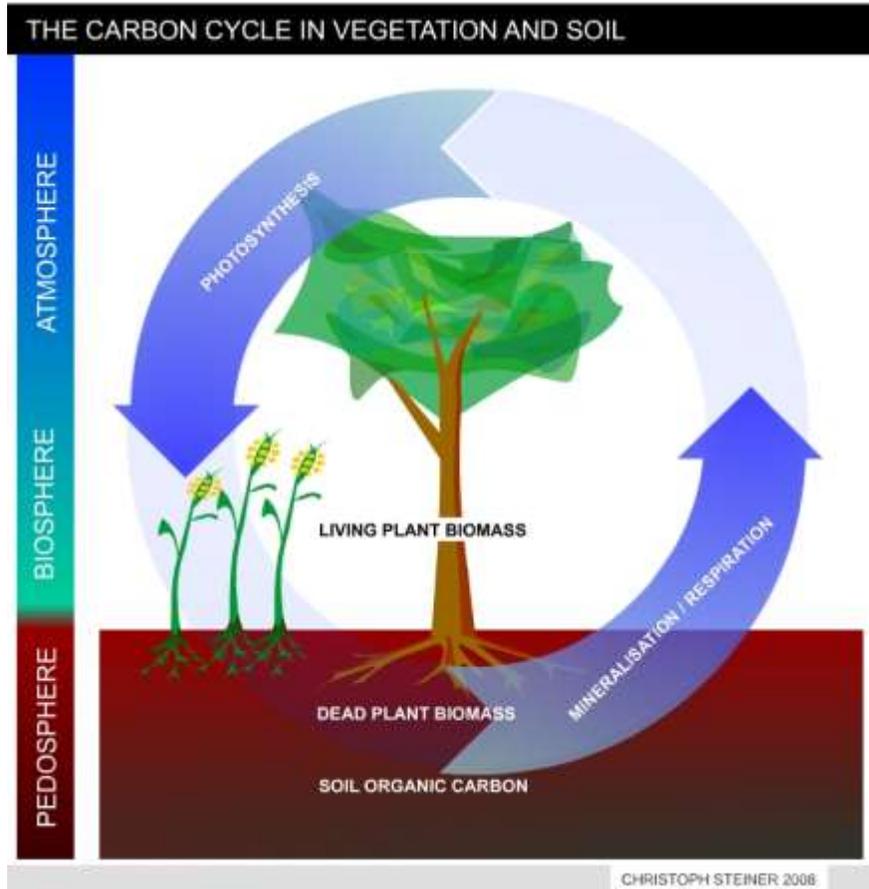
Amphibians in Decline: Why do we care?



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Amphibians in Decline: Why do we care?



Amphibians in Decline: Why do we care?



Amphibians in Decline: Why is it happening?

- Habitat Fragmentation
- Disease
- Pollution
- Climate Change





Climate Change and Amphibians

Amphibians and Climate Change

- ↘ Late hibernation
- ↘ Early emergence



Amphibians and Climate Change

🦎 Diseases

🦎 Fungus

- 🦎 *Batrachochytrium dendrobatidis*
- 🦎 *Batrachochytrium salamandrivorans*
- 🦎 *Saprolegnia spp.*

🦎 Virus

- 🦎 Ranaviruses

🦎 Others

- 🦎 Misc. bacteria
- 🦎 Parasites



Amphibians and Climate Change

🦎 Reproduction

- 🦎 Seasonal breeders
- 🦎 Rainfall dependency
- 🦎 Vernal pools





Helping the Problem

Conservation to help

- 🦎 Disease
- 🦎 Treatments
- 🦎 Disease resistant animals



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Conservation to help

🦎 Reproduction

- 🦎 Land management
- 🦎 Assurance colonies
- 🦎 Population monitoring



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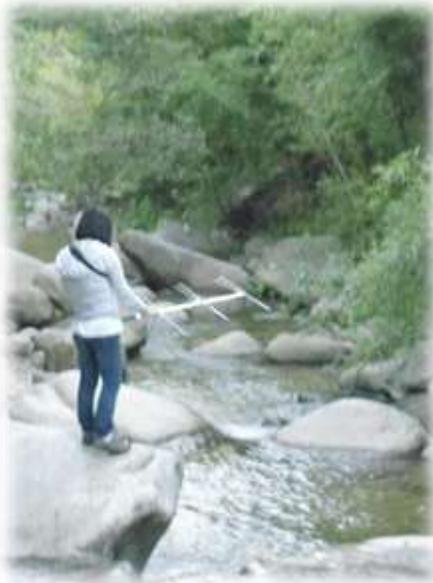
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**DETROIT ZOO
NATIONAL AMPHIBIAN CONSERVATION CENTER**

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